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FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			JANKUS, ALMIS R	
			ART UNIT	PAPER NUMBER
			2671	15

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/845,960

**Applicant(s)**

TAKIGUCHI ET AL.

**Examiner**

Almis R Jankus

**Art Unit**

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 36-90,96-109,117,118 and 123-147 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-90,96-109,117,118 and 123-147 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 08/573,519.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. Claims 36-90, 96-109, 117, 118, 123-147 are presented for examination.

2. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 36-75, 77-86, 90, 96-105, 109, 117-118, 123-130, 132-136, 138-140, 142-147 are rejected under 35 U.S.C. 102(b) as being anticipated by Perlin et al.

Claim 36 requires "A hierarchical data display method for displaying hierarchically-managed data items, comprising steps of: dividing a display area into an area in which a data icon representing a data item belonging to one level is displayed, and an area in which a data icon representing a data item belonging to a child level is displayed; and displaying said data icons with a size varied depending on a hierarchical depth and at a position so that a hierarchical relation between said data icons is represented as a nesting shape."

In the instant specification, at figure 3, and at page 45 lines 13-14, applicants indicate that "Squares 2a and 2b and other squares [of figure 3] represent data items (or may be referred to as data icons)." From this explanation and other descriptions and drawings of this specification it is understood that a "data icon" is an area on the screen which represents data items (for example, text, pictures, graphics, etc.), by either displaying the actual data or a portion thereof, a modified version of the data, or some other mark which is representative of the data, within that area. A "display area" is understood to include either the whole display screen, the portion of the display screen on which a "data icon" is displayed, any other portion of the screen, or any combination of the above.

It is further understood that the claimed "one level" "data icon" and "child level" "data icon" represent data which are hierarchically related; the relationship expressed by size variation and nested positioning. With respect to the claimed "hierarchical depth", the claim is not specific as to the sense of "depth", however, it is inherent in any hierarchical relationship with multiple levels, that it has order of rank; therefore, rank and depth are considered tantamount.

Perlin et al. teach the claimed invention at pages 57-64. At page 60, figure 3, Perlin et al. teach the claimed "data icon representing a data item belonging to one level", as the larger rectangle with the year-text "1992" representing the year 1992, the "one level" as the "year"-"level" in the temporal hierarchy of year-month; "a data icon representing a data item belonging to a child level", as the smaller rectangle with the month-text "Jan" representing the month January, the "child level" as the "month"-"level"

in the temporal hierarchy of year-month ("month" being the child of the "year" in the temporal hierarchy); "a size varied depending on a hierarchical depth", the "1992"-data icon" being larger than the "Jan"-data icon", with "1992" and "Jan" being at different depths in the temporal hierarchy of year-month; "and at a position so that a hierarchical relation between said data icons is represented as a nesting shape", with the "Jan"-data icon" being positioned such that it is inside (nested) the "1992"-data icon", representing the temporal hierarchical relationship that the month January is contained in the year 1992.

Claims 49 and 125 are similar to claim 36 with the exception that the claims' preambles recite a browser system. Although this limitation is given no patentable weight because it merely recites a use or purpose of the claimed invention; and the body of the claim following the preamble is a self-contained description and does not depend on the preamble for completeness, Perlin et al. teach navigating by peering and roaming over different parts of the data, at the abstract, which corresponds to browsing.

Claim 117 is similar to claim 36 but further requires a computer program product comprising a computer usable medium having computer readable program code means for displaying hierarchically-managed data items. Perlin et al. teach this at pages 61-62 at section 4.

With respect to claim 62, Perlin et al. teach the claimed hierarchical data browser system, comprising:

a hierarchical data managing means for managing a plurality of data items hierarchically; page 60, left column, as "ephemeral database manager";

and a level display means that based on information representing a level and being retained in said hierarchical data managing means, at pages 58-60 at section 2 "An Example Application";

defines an area, in which all data items belonging to one level and child levels are displayed, with a border encircling the whole of the area, page 60 figures 2, 3, and 4;

displays said area as an area having a background painted in a given background color, at pages 62-63 at section 5.4 "An Infinitely Scalable Painting Program";

represents said data items to be displayed in said display area using data icons serving as data identification information, at page 60 sections 2, 3, 3.1 and 3.2.

and draws a display area for each of levels to be displayed in said display area; page 60 figures 2-4;

that is, a display area for each of child levels within said level display area using the same component elements; at page 60, figures 2-4.

Claim 72 requires an image editing method for cutting out a designated area of an image in a given form, comprising steps of: preparing a plurality of cutout forms;

which Perlin et al. teach at page 60 section 3.2; designating one of said cutout forms and placing it at a desired position in an image; at sections 3.1-3.2; changing said cutout form into a desired size; at page 60 as "scale"; and outputting a portion of said image inside said cutout form as a cutout image. Section 3.2.

Claim 73 requires an image editing method for cutting out a designated area of image in a given form, comprising steps of preparing a cutout form and image mutually independently with designating an identifier, position, and size of said cutout form as attributes of said image; at page 60 sections 3.1-3.2; when a registered cutout form is placed at a desired position in an image, if said cutout form is enlarged or reduced to a desired size, registering said identifier of said cutout form, position, and size as attributes of said image; at section 3.1-3.2; and outputting a portion of said image inside said cutout form as a cutout image according to said registered image attributes; at pages 60-61, sections 3.2-3.5.

Claim 77 requires an image editing method for a hierarchical data management system for managing a plurality of data items hierarchically, comprising steps of:

registering an icon display size representing a size of an icon to be displayed and a data icon display position representing a display position for an icon as attributes of each data;

and determining said icon display size and data icon display position in hierarchical order,

and displaying data icons serving as data identification information with a size made different in hierarchical order so that data icons belonging to the same level can be distinguished from data icons belonging to other levels and at a position so that a hierarchical relation between said data icons is represented as a nesting shape; at the abstract, at figures 2-4, at sections 3 – 3.5.

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Claim 96 is rejected with the same rationale as the rejection of claim 77.

Claim 80 requires an image editing method for a hierarchical data management system for managing a plurality of data items hierarchically, comprising steps of: displaying data icons serving as data identification information with a size made different in hierarchical order; accessing data corresponding to a desired data icon by designating said desired data icon; and displaying a data icon representing data whose access frequency is relatively larger with a relatively larger size. These features are similar to those presented above with the exception of the size being related to access frequency. Perlin et al. Teach this feature as semantic zooming at page 58, section 1.3 and at the abstract. Each time a user clicks on an object he sees an enlarged representation. Thus, the more accesses (clicks), the greater the magnification.

Claims 99 and 123 are rejected under the same rationale applied to claim 80.



Claim 126 requires a hierarchical data display method of displaying hierarchically managed data items, comprising the steps of: setting exclusively in a background indicating the parent level, a first area in which data item(s) belonging to a parent level is displayed and a second area in which data item(s) belonging to a child level is displayed, in a display area of every level; and controlling a display of data icons respectively representing the data items in each of the areas. Perlin et al. Teach the setting exclusively in a background indicating a parent level as the Pad information plane, as explained in the abstract; a first area being the screen, as explained at section 1.2 at page 57; and a second area in which data items belonging to a child level is displayed, corresponding to Perlin's portals, at page 57 section 1.2; in a display area of every level, at the abstract, and at page 59 figure 1; and controlling the representations, at pages 57-58.

Claims 136, 146 and 147 are rejected under the same rationale applied to the rejection of claim 126.

Claims 37 and 50 require as said hierarchical depth increases, said data icon size is decreased. Perlin et al. Teach this at figures 2-4.

Claims 38 and 51 as said hierarchical depth increases, said, data icons are simplified more greatly. Perlin et al. Teach this at page 62 section 4.1.

Claim 64 requires said level display means makes data icons smaller in size and simpler as said hierarchical depth increases. Perlin et al. Teach this at pages 60-61, at section 3.2.

Claims 84 and 103 require a data icon belonging to a level subordinating a marked level is vignettied and displayed. Perlin et al. Teach this at section 4.1.

Claims 85 and 104 said vignetting is achieved by enlarging raw data representing the number of pixels smaller than the number of pixels to be displayed. Perlin et al. Teach this at section 4.1.

Claims 86 and 105 require a data icon belonging to a higher level is vignettied more intensely. Perlin et al. Teach this at section 4.1.

Claims 135 and 145 require a size of each data icon is determined corresponding to the number of the data items. Perlin et al. Teach this at figures 2-4.

Claims 39, 52 and 127 require said sizes of said division areas are determined on the basis of the number of data items belonging to one level and the number of data items belonging to child levels. This can be seen at figures 2-4 at Perlin et al. Note in figure 3 that 1992 level has a size according to the number of months (child levels) that

it contains; and the child levels have a size according to the month identifiers which they contain.

Claims 40, 53, 128 and 138 require when there are a plurality of child levels, a display area for each child level is determined according to the number of data items belonging to levels subordinate to said child level. Perlin et al. Teach this at figures 2-4.

Claims 41, 54, 129, and 139 require said child levels are displayed in a background expressing a parent level, and said background is selected and displayed so that a hierarchical depth can be distinguished. Perlin et al. Teach this at figures 2-4 and at the abstract.

Claims 42, 55, 130 and 140 require as said hierarchical depth increases, said background is displayed in a deeper color. This is inherent regarding any color because, by definition, a deeper hierarchical depth will be associated with some color, the color being deeper by virtue of being at a deeper hierarchical depth.

Claims 43, 56, 45, 58, 133, 143, 66, 78, 97, 102, 83, require a step of zooming in a desired level by performing a given operation after designating a display area for said desired level; zooming out a level zoomed by performing said given operation so as to display a parent level; zooming in a desired level by performing a given operation, wherein when a zoom out is instructed in the desired level, the display of items are

controlled so that data items belonging to parent level(s) of the desired level are displayed; wherein when said zoom-in means is selected, said zoom direction is a direction toward a deeper position in a hierarchy, and when said zoom-out means is selected, said zoom direction is a direction toward a shallower position in said hierarchy; wherein a level or data icon is zoomed in, panned, or zoomed out by varying said icon display size and data icon display position. Perlin et al. Teach these features as semantic zooming and navigating using portals, at the whole article.

Claims 44, 57, 132, 142 require displaying the detailed contents of a desired level by performing a given operation after designating a display area for said desired level; and zooming in a desired level by performing a given operation, wherein when a zoom up is instructed in the desired level, the detailed contents of the desired level are displayed. Perlin et al. Teaches this at figures 2-4.

Claims 46, 59, and 69 require grouping a plurality of desired data icons, and displaying a leading data icon in such a way that it can be recognized that a plurality of desired data icons are grouped together. Perlin et al. Teach this at figures 2-4. Note the grouping of month data icons grouped together with the leading data icon "1992".

Claims 47 and 60 require displaying a list of said plurality of data icons grouped together. Perlin et al. Teach this at figures 2-4. Note the list of months data icons.

Claims 48, 61 and 71 require rearranging a plurality of data icons grouped together, a step of releasing a group, and a step of deleting a desired data icon from a plurality of data icons grouped together. Perlin et al. Teach this at page 60 as the ephemeral database manager.

Claim 63 requires said level display means includes an area defining means for calculating in advance a minimum area necessary for displaying data icons in one level display area, and defining a display area for child levels and a display area for data icons proportionally according to a ratio of the number of all data items belonging to child levels and levels subordinate to said child levels to the number of data items belonging to said level to such an extent that said display area for data icons will not become smaller than said minimum necessary area. Perlin et al. Teach this at pages 60-62. Note particularly section 4.1.

Claim 65 requires a zoom-in means for zooming in a level so as to move a view point to a deeper position in a hierarchy, a zoom-out means for zooming out a level so as to move a view point to a shallower position in said hierarchy, and a hierarchical depth indicating means for indicating a hierarchical depth of a zoomed-in level and a zoom direction. Perlin et al. Teach this at sections 5.3-5.6.

Claim 67 requires said level display means includes an assessing means for assessing a size of an area allocated to one data icon relative to a threshold of a size of

a level area which is provided as a reference for assessing a size of an area allocated to one data icon, and a setting means for setting at least one of the presence or absence of a data icon picture expressing a data icon, the presence or absence of a data name display, a font size for data name display, and a size of an icon picture according to the result of assessment. Perlin et al. Teach this at section 4.1.

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Claim 68 requires when an available memory is small, said assessing means accordingly increases said threshold of a size of an area allocated to one data icon which is used to determine whether or not to display an icon picture. Perlin et al. Teach this at sections 4.1-4.2.

Claim 70 requires a list display means for use in displaying a list of data icons belonging to a group corresponding to a group icon by designating said group icon, and a detailed information display means for use in displaying detailed information of data corresponding to a desired data icon selected from said list by designating said data icon. Perlin et al. Teach this at figures 2-4.

Claim 74 requires said cutout form is placed on the center of the portion of an image: to be cut out, and then enlarged or reduced with the center position thereof fixed. Perlin et al. Teaches this at section 3.2.

Claim 75 requires said cutout form is composed of a form used to cutting out an image and a form to be output as a perimeter of a cutout. Perlin et al. Teach this at section 3.2, at page 60 with the portal giving a shaped view.

Claims 79, 98, 81 and 100 require an access frequency meaning the number of accesses gained to data is included in said data attributes, and a data icon representing data whose access frequency is relatively large is displayed with a relatively large size. Perlin et al. Teach this feature as semantic zooming at page 58, section 1.3 and at the abstract. Each time a user clicks on an object he sees an enlarged representation. Thus, the more accesses (clicks), the greater the magnification.

Claims 82 and 101 require when said data icon displayed with a relatively large size is not accessed for a period of time exceeding a certain period, said data icon is reduced in proportion to said period during which said data icon is not accessed or an access frequency of another data. Perlin et al. Teach this at page 60 with individual display items being ephemeral. Further, the claims suggest that a non-accessed data icon is reduced proportion to one which has an access frequency (presumably higher access frequency). If this is the case, then a non-accessed data icon could remain the same size while the accessed data icon increases in size with each click, making the non-accessed data icon proportionately smaller relative to the accessed data icon, but the same size relative to itself.

Claim 124 requires said computer usable medium further having a hierarchical data and an access frequency data. Perlin et al. Teach this at page 61 section 3.3.

Claims 90 and 109 require displaying a position in a whole hierarchy, which is currently displayed in a screen, within a separate window in the form of a position on a plane defined with vertical and lateral lines and a position in a depth direction, and a step of displaying a desired level at a desired enlargement ratio by designating a desired position within said separate window. Perlin et al. Teach this at figure 1 and at sections 3-3.5.

Claim 118 requires said computer usable medium further having a hierarchically-managed data. Perlin et al. Teach this at the abstract.

Claims 134 and 144 require judging whether a remaining area is left in which the first and second areas have not been set, wherein the first and second areas are set in the remaining area when the remaining area is left. Perlin et al. Teach this at pages 57-58 at section 1.2.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 76, 87-89, 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlin et al. as applied to claims above, and further in view of Bederson et al.

Claim 76 requires said cutout image is used as a Sumner image in a data base system. Bederson et al. Teach this at page 17 with the teaching of displaying graphical abstractions of the accrued histories as parts of the objects themselves, especially as it relates to code browsing.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use accrued histories because it would enable a developer to see that a particular section of code has been copied and perhaps be led to correct a bug

not only in the piece of code being viewed but also in the code from which it was derived.

Claims 87 and 106 require date information selected from among date information representing a date of creation of data, date information representing a date of access gained to data, date information specified in data is included in said data attributes, said icon display size and data icon display position are determined date-orderly, and thus data icons serving as data identification information are displayed with a size made different date-orderly so that data icons associated with the same date can be distinguished from data icons associated with other dates.

Bederson et al. Teach this at figure 5. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use Pad for a timeline because history naturally lends itself to being looked back on at different scales.

Claims 88 and 107 require data icons associated with the same date are zoomed in or zoomed out by varying said icon display size and data icon display position.

Bederson et al. Teach this at figure 5 and at pages 22-24.

Claim 89 requires either said hierarchical display or date-orderly display can be selected. Bederson et al. Teach hierarchical display at pages 19-22, and date orderly display at figure 5.

Claim 108 requires a switching means for selecting either said first display means or second display means. Bederson et al. Teach this at page 20.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 137 recites the limitation "The apparatus according to claim 36".

There is insufficient antecedent basis for this limitation in the claim because claim 36 is a method claim.


9. Claims 131 and 141 end abruptly without completing the functional language. The claim scope cannot be determined.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R Jankus whose telephone number is 703-305-9795. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 703-305-9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AJ



ALMIS R. JANKUS  
PRIMARY EXAMINER